

ABSTRACT OF THE DISCLOSURE

A method for transmitting security data in an Ethernet PON (Passive Optical Network) system is provided. The method includes the steps of: a) creating a frame
5 comprised of a data field for encrypting the security data, a key information field for storing
key information used for decrypting the encrypted data of the data field, and a security
frame, wherein the security frame includes an ONU ID (Identifier) field for indicating ONU
ID information identified by an ONU having the destination user, and a user ID field for
indicating a security ID identified by the destination user; and b) transmitting the created
10 frame.